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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/442,187	11/16/1999	BRUNN WALL ROYSDEN JR.	81127.002	5513

7590

07/17/2002

FENNEMORE CRAIG  
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Phoenix, AZ 85012

EXAMINER
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CONE, DARIUS N

ART UNIT	PAPER NUMBER
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2854

DATE MAILED: 07/17/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/442,187

Applicant(s)

ROYSDEN, BRUNN WALL

Examiner

Darius N. Cone

Art Unit

2854

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on The request filed 4-11-2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 10-68 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-16, 18-25, 27-34, 36-43, 45-50, 52-59, 61-66 and 68 is/are rejected.
- 7) ☒ Claim(s) 17, 26, 35, 44, 51, 60 and 67 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 10, 14, 15, 23, 24, 28, 32, 33, 37, 41, 42, 46, 48, 49, 53, 57, 58, 62, 64 and 65 are rejected under 35 U.S.C. 102(b) as being anticipated by Phillips (US pat # 5,708,428).

With respect to claims 10, 28, 37, 46, 53 and 62, Phillips teaches a plurality of keys 12, each key including a key structure (see Figs 1-3 and 6), a keyboard structure holding the plurality of keys in place relative to one another and defining a space between the keys structures of at least two of the plurality of keys. Phillips also teach a computer component (26), which is not a keyboard component being disposed at least partly in the space between the key structures (see col. 5, lines 30-42).

With respect to claims 14, 23, 32, 41, 48, 57 and 64, Phillips teaches computer component 26 with electrical contacts 22 disposed on the secondary surface of integrated circuit 16 between key structures 12.

With respect to claims 15, 24, 33, 42, 49, 58 and 65, Phillips teaches passive component 42, which is a light guide have a plurality of apertures, or though-holes, 44 to allow a conductor 46 at the bottom of each key to contact the secondary side of integrated circuit board 16 (see col. 5, lines 58-65).

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 11-13, 16, 18-22, 25, 27, 29-31, 34, 36, 38-40, 43, 45, 47, 50, 52, 54-56, 59, 61, 63, 66 and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Phillips (US pat # 5,708,428) in view of Brick et al. (US patent # 6,172,620 B1).

With respect to claim 19, Phillips teaches all that is claimed, as discussed in the above rejection of claims 10, 14, 15, 23, 24, 28, 32, 33, 37, 41, 42, 46, 48, 49, 53, 57, 58, 62, 64 and 65 except for a central processing unit of a computer, along with output means for outputting data from the computer. Brick et al. teach of computer processor 30 within a portable data terminal (PDT) 10 and communication port (26) for outputting data (see col., 4, lines 6-9). It would be obvious for one ordinary skilled in the art to modify the electronic device of Phillips who teach providing backlighting to the keypads by including a processor receiving or inputting information, a power source or any computer component as taught by Brick et al. which maximize the use of extra space designated between the keypads not normally used for computer components, increasing the device's portability while providing light under low light or dark conditions.

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With respect to claims 11-13, 16, 18, 20-22, 25, 27, 29-31, 34, 36, 38-40, 43, 45, 47, 50, 52, 54-56, 59, 61, 63, 66 and 68. (see Brick et al., col. 4, lines 1-67 and col. 6, lines 24-67). Phillips teaches all that is claimed, as discussed in the above rejection of claims 10, 14, 15, 23, 24, 28, 32, 33, 37, 41, 42, 46, 48, 49, 53, 57, 58, 62, 64 and 65 except for a power means, power regulation means, a power source and output means for outputting data from the computer. It would be obvious to one ordinary skilled in the art to modify Phillips by providing a power means, power source and a power regulation means when using a processor or any computer component as taught by Brick et al. in order to provide power for operation (see Brick et al., col. 8, lines 8-22). Brick et al. also teach communication port 26, which can output information received from PDT 10, making it obvious to one ordinary skilled in the to provide an output when an operation is performed and a data is desired.

***Allowable Subject Matter***

4. Claims 17, 26, 35, 44, 51, 60, 67 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Darius N. Cone whose telephone number is (703) 308-1061. The examiner can normally be reached on 9am - 5:30pm.

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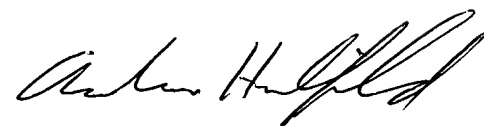
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (703) 305-6619. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-5841 for regular communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

DNC

July 9, 2002



**ANDREW H. HIRSHFELD**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2800**